

CASE STUDY

DSLS 2023

1

PRODUCT ANALYSIS

analysis process to find the potential products with the calculate total sales, total quantity orders to evaluate team performance.

2

CUSTOMER ANALYSIS

analysis process to know the behavior customers by discount rates, total quantity orders to evaluate team performance.

3

COHORT ANALYSIS

analysis process the level of customer retention based on order time to measures product or services performance.

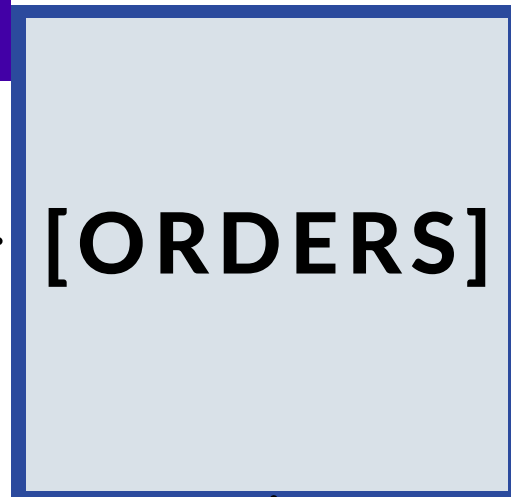
**BY : MICHAEL
SITANGGANG**

PRODUCT ANALYSIS

- *PRODUCT CATEGORY ANALYSIS WITH TOTAL SALES, TOTAL QUANTITY ORDERS MONTHLY (RANK) IN THE YEAR 1997*
- *PRODUCT CATEGORY ANALYSIS WITH THE TOP 5 TOTAL QUANTITY TO GET TOP CONSUMER COUNTRIES (1997)*



RESULT PROCESS



**AGGREGATION PRICE
AFTER DISCOUNT**

WHERE YEAR ORDER DATE = 1997

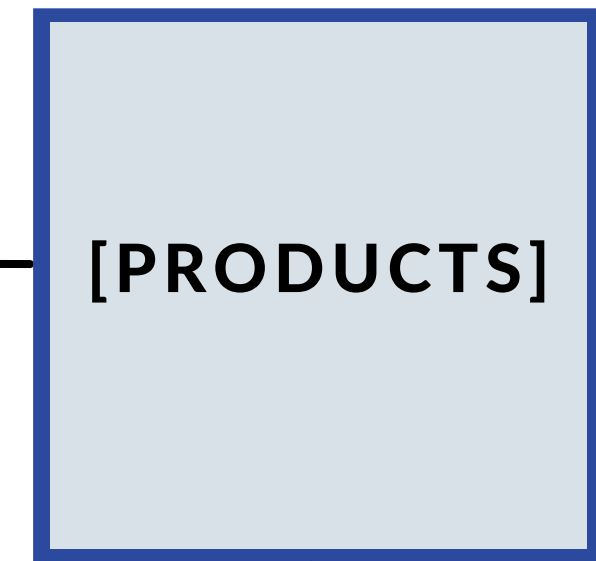


LEFT JOIN BY
ORDER ID

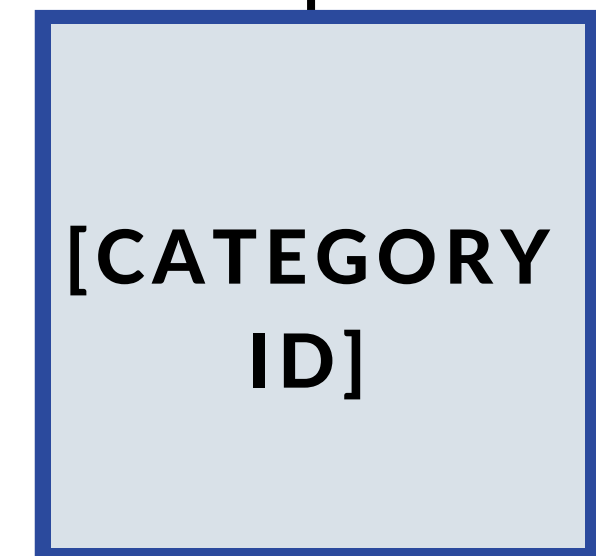
LEFT JOIN BY
CUSTOMER ID



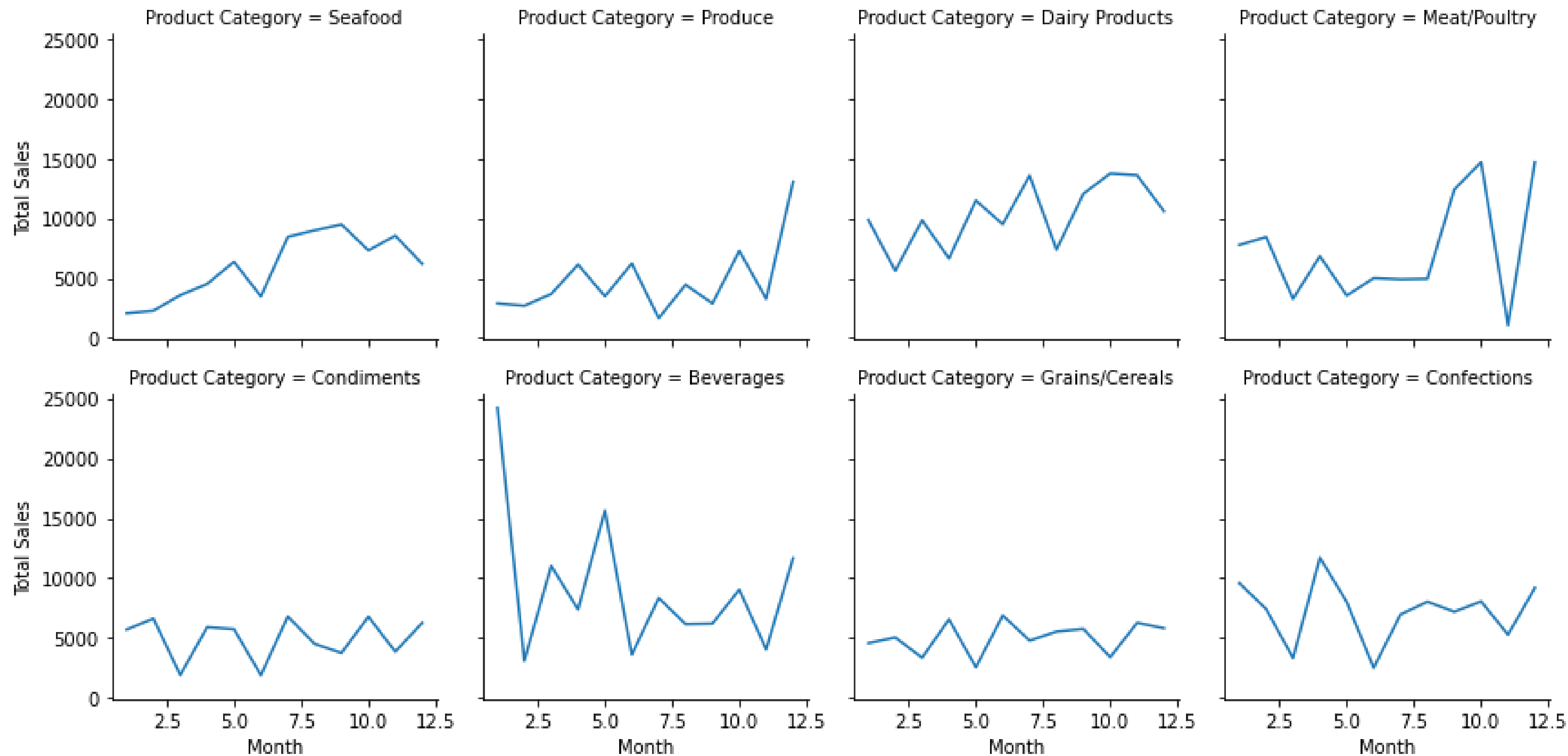
LEFT JOIN BY
PRODUCT ID



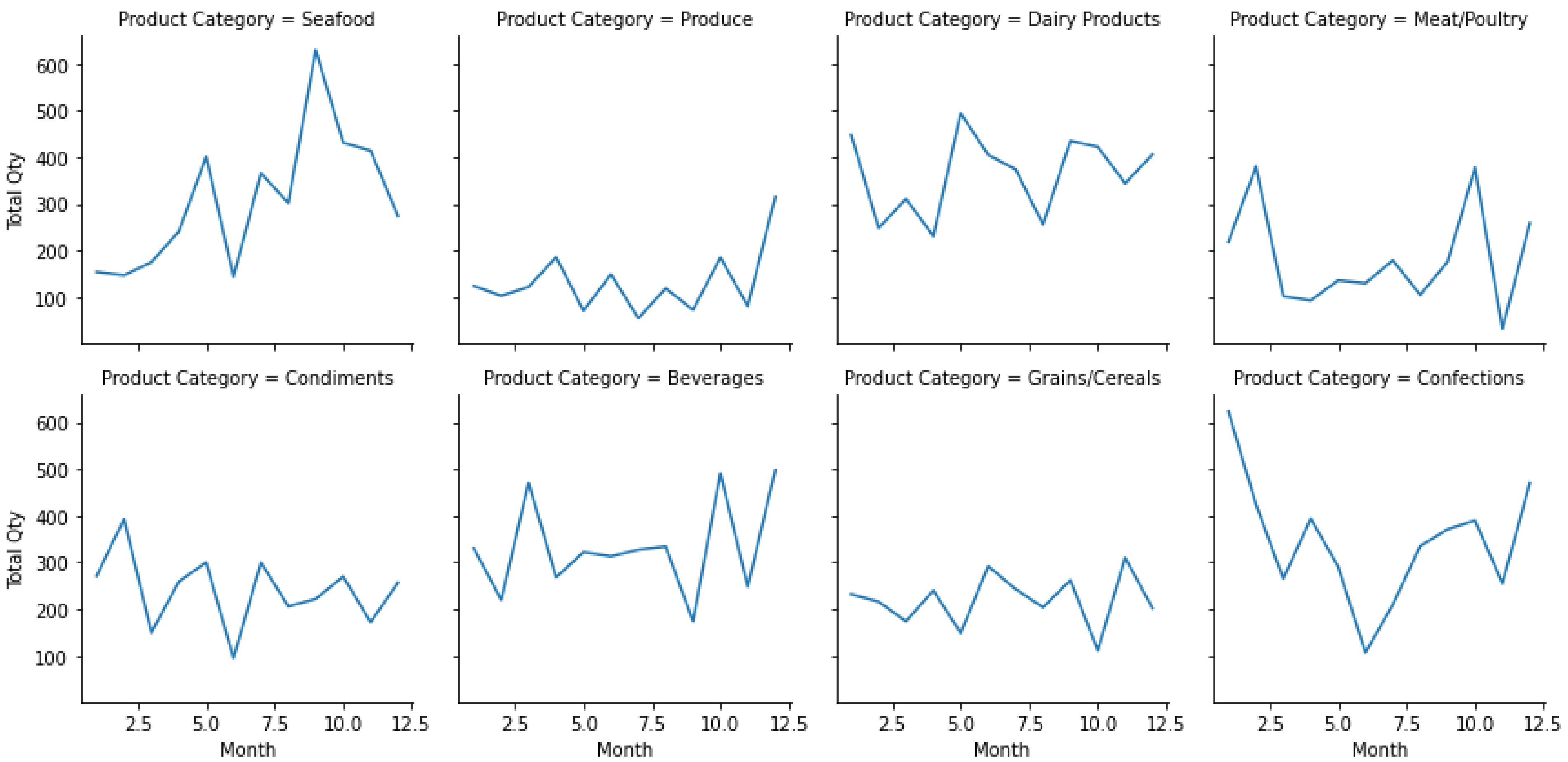
LEFT JOIN BY
CATEGORY ID



PRODUCT CATEGORY ANALYSIS WITH TOTAL SALES IN THE YEAR 1997

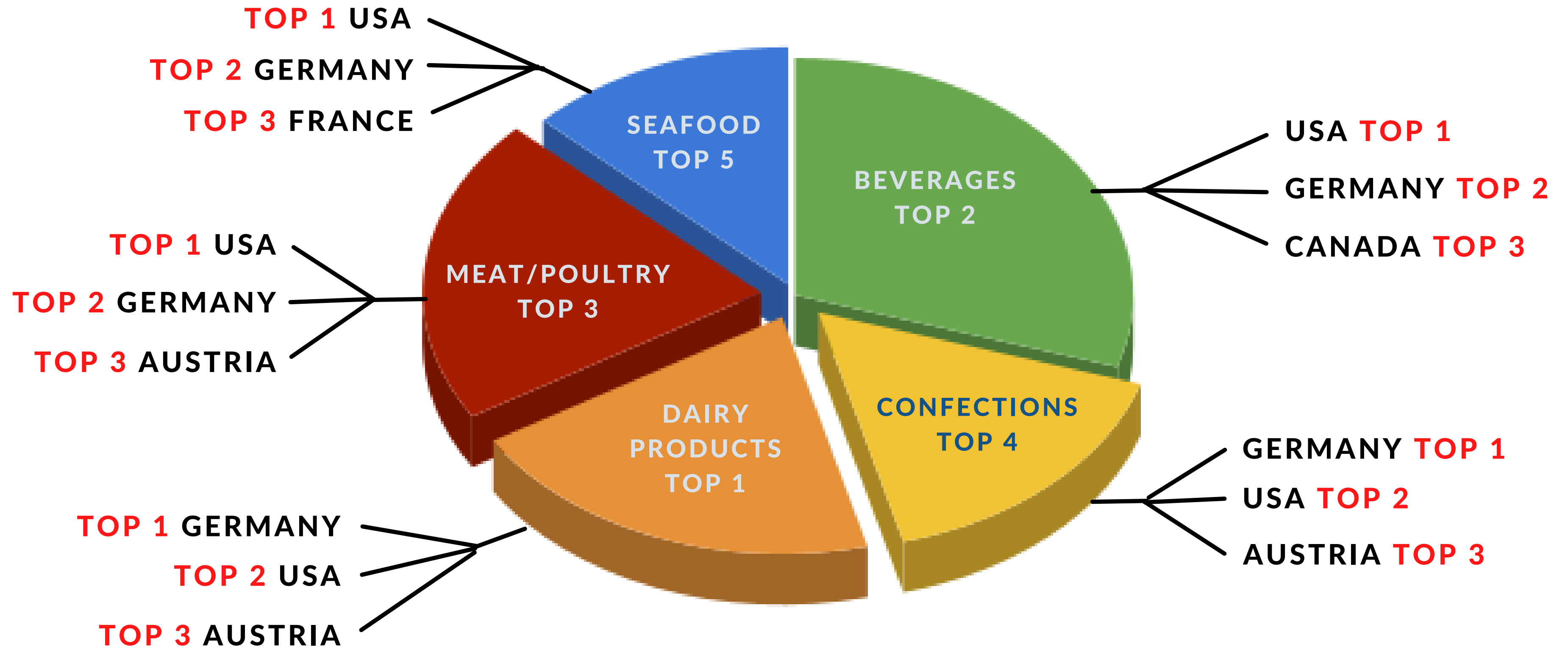


PRODUCT CATEGORY ANALYSIS WITH TOTAL QTY ORDER IN THE YEAR 1997



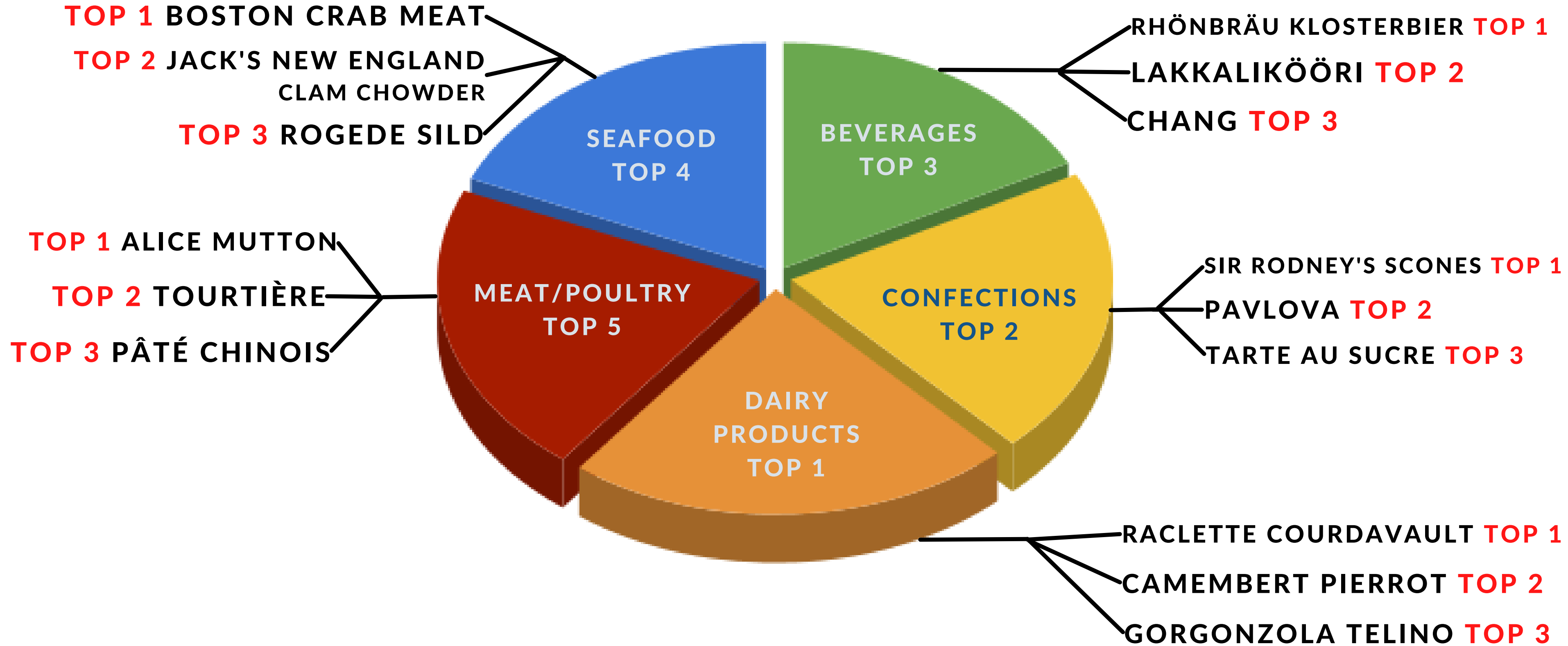
CATEGORY PRODUCTS AND MOST CONSUMER COUNTRY

TOP 5 Total Sales Orders 1997



CATEGORY PRODUCTS AND MOST NAME PRODUCTS

TOP 5 Total Qty Orders 1997



Summary

- 1 *The pattern of total sales orders and total qty orders looks the same, it is recommended to use the forecasting method.*
- 2 *From the annual trends pattern, In the Q3 period, the average total sales of each production category increased significantly.*
- 3 *From the reports of the top 5 total sales orders and total qty orders, USA and Germany are a potential customer country for our corporate.*

CUSTOMER ANALYSIS

- *CONSUMER ANALYSIS BY CONTACT TITLE AND DISCOUNT RATES ON PRODUCTS*
- *CONSUMER ANALYSIS BY CONTACT TITLE AND TOP 5 PRODUCT CATEGORIES WITH AGGREGATE TOTAL QUANTITY ORDERS.*

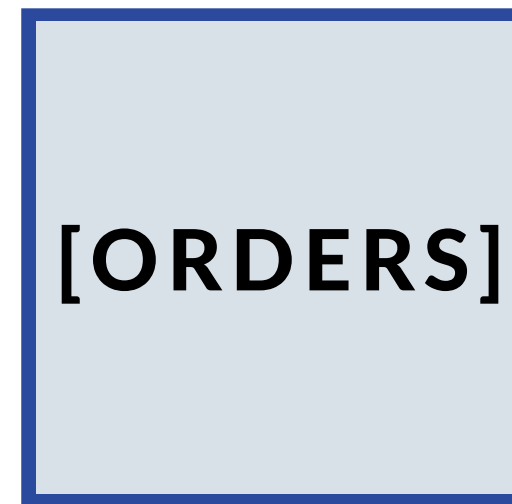


RESULT PROCESS



CONDITIONAL DISCOUNTS
(<10%, 10%-20%, >20%)

AVERAGE UNIT PRICE ORDERS



LEFT JOIN BY
CUSTOMER ID

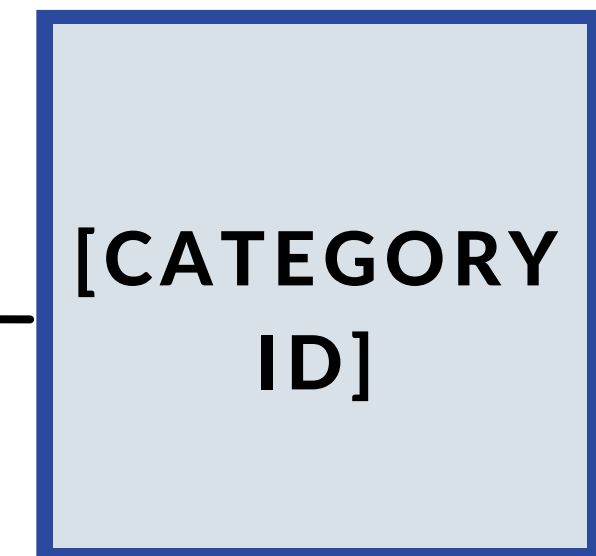


LEFT JOIN BY
ORDER ID

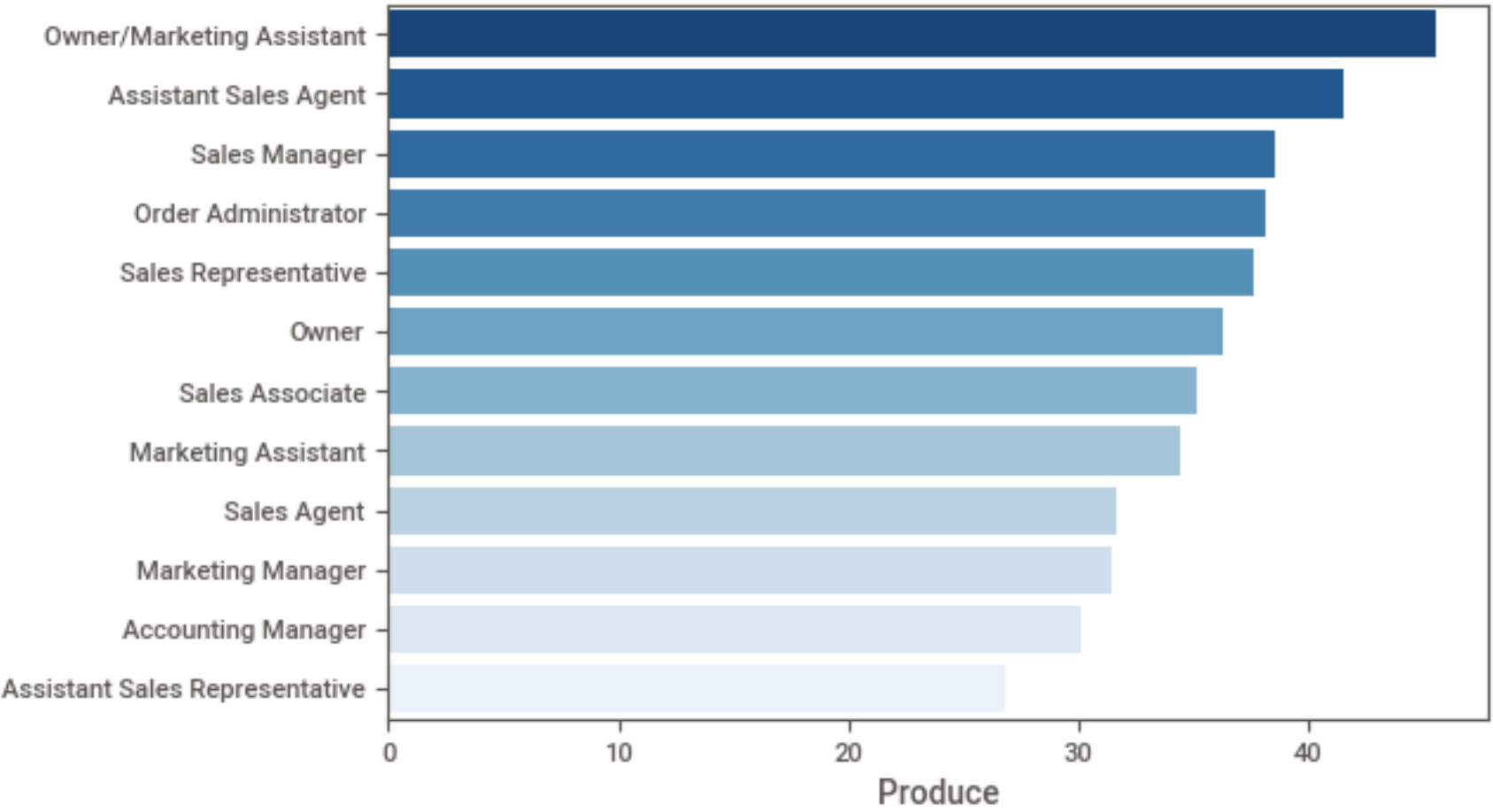
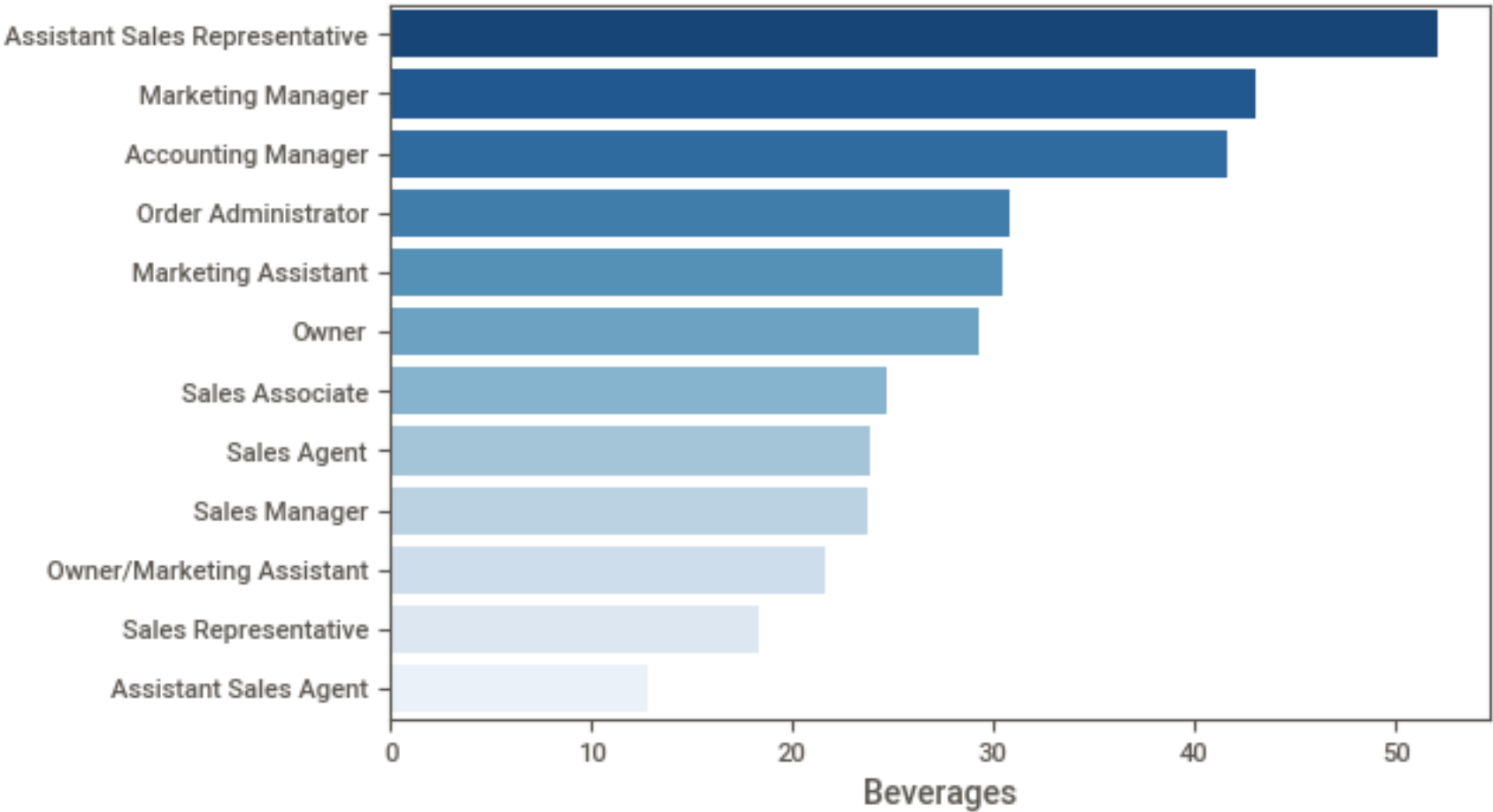
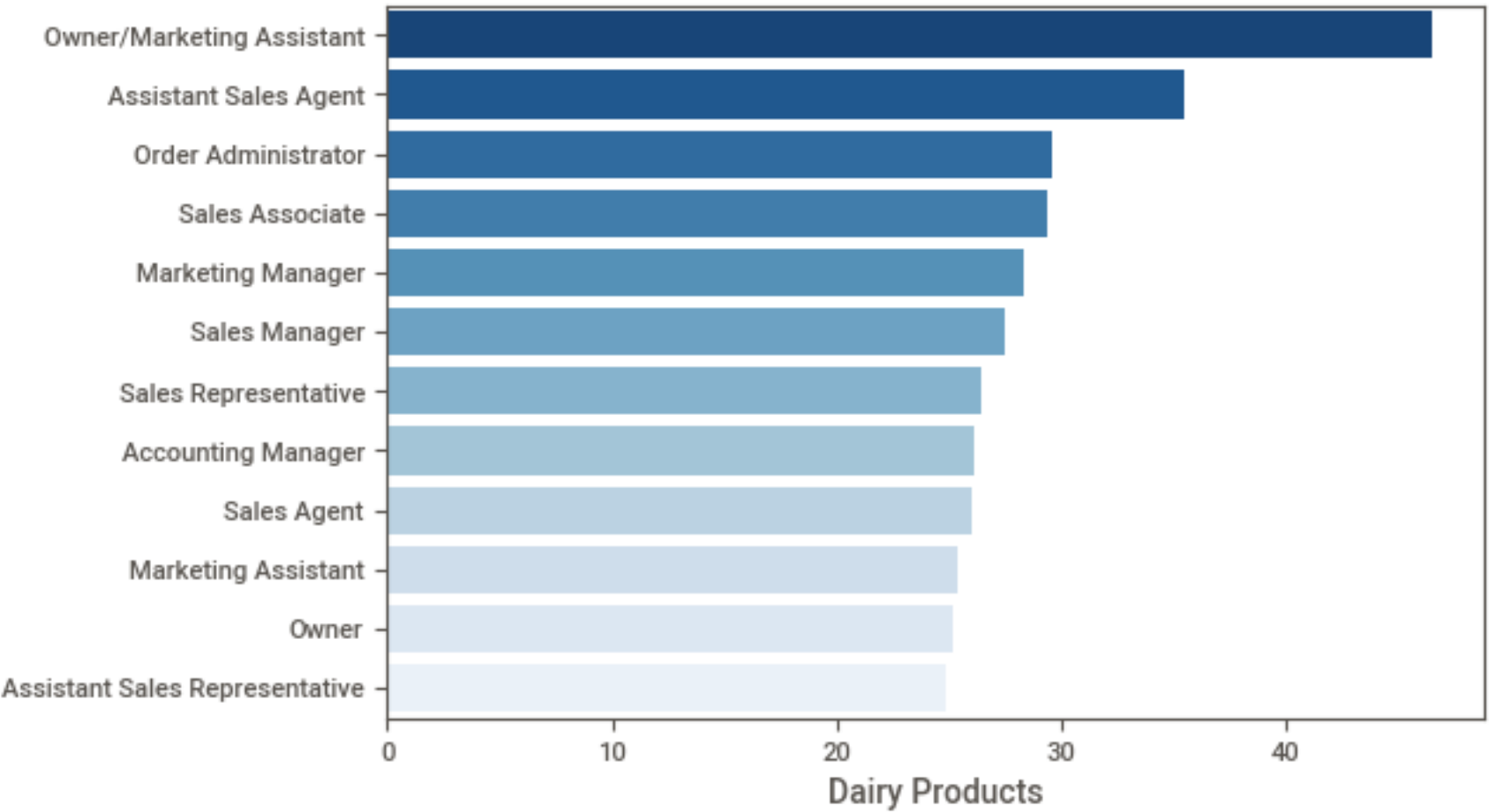
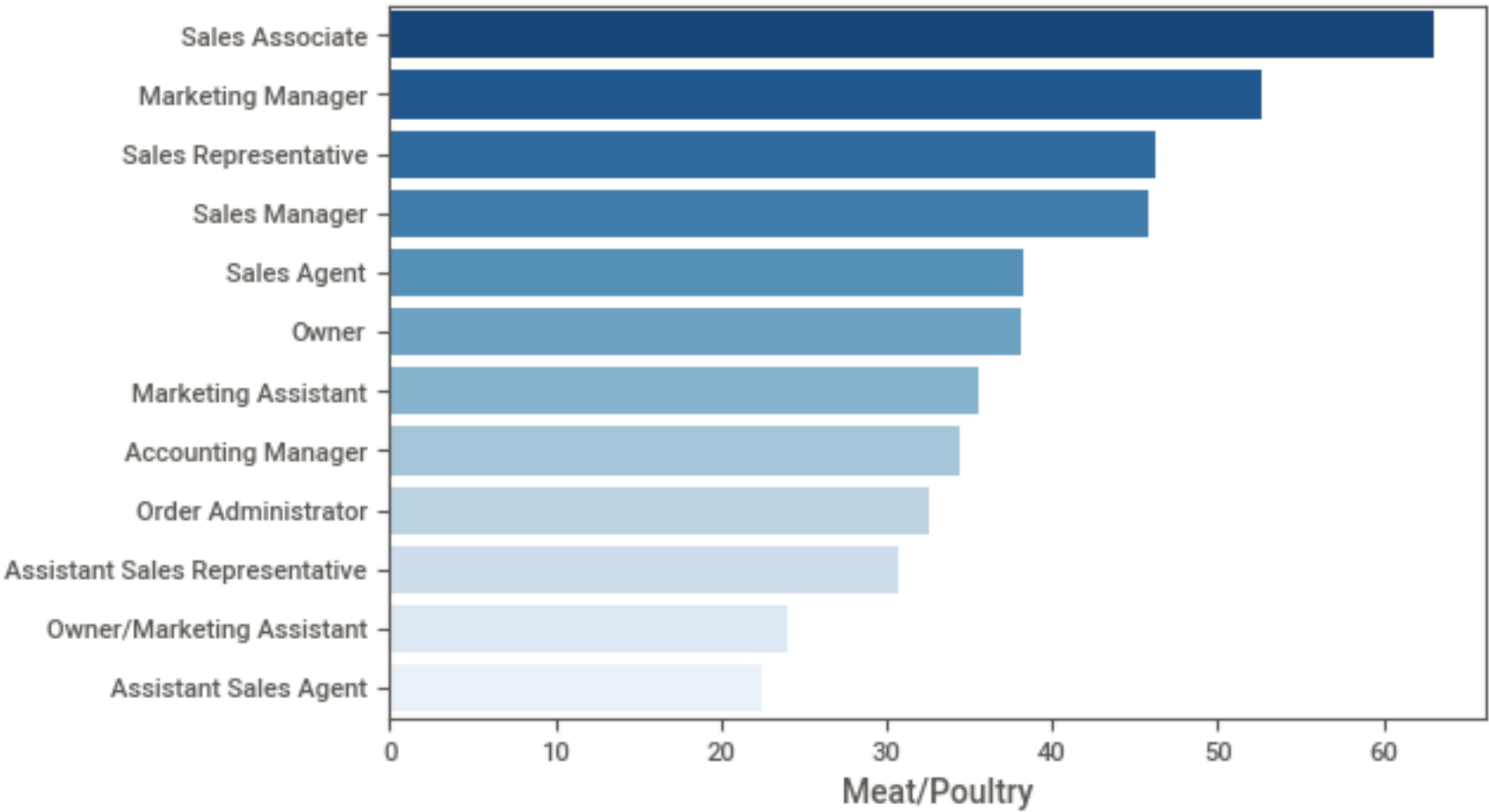
LEFT JOIN BY
PRODUCT ID



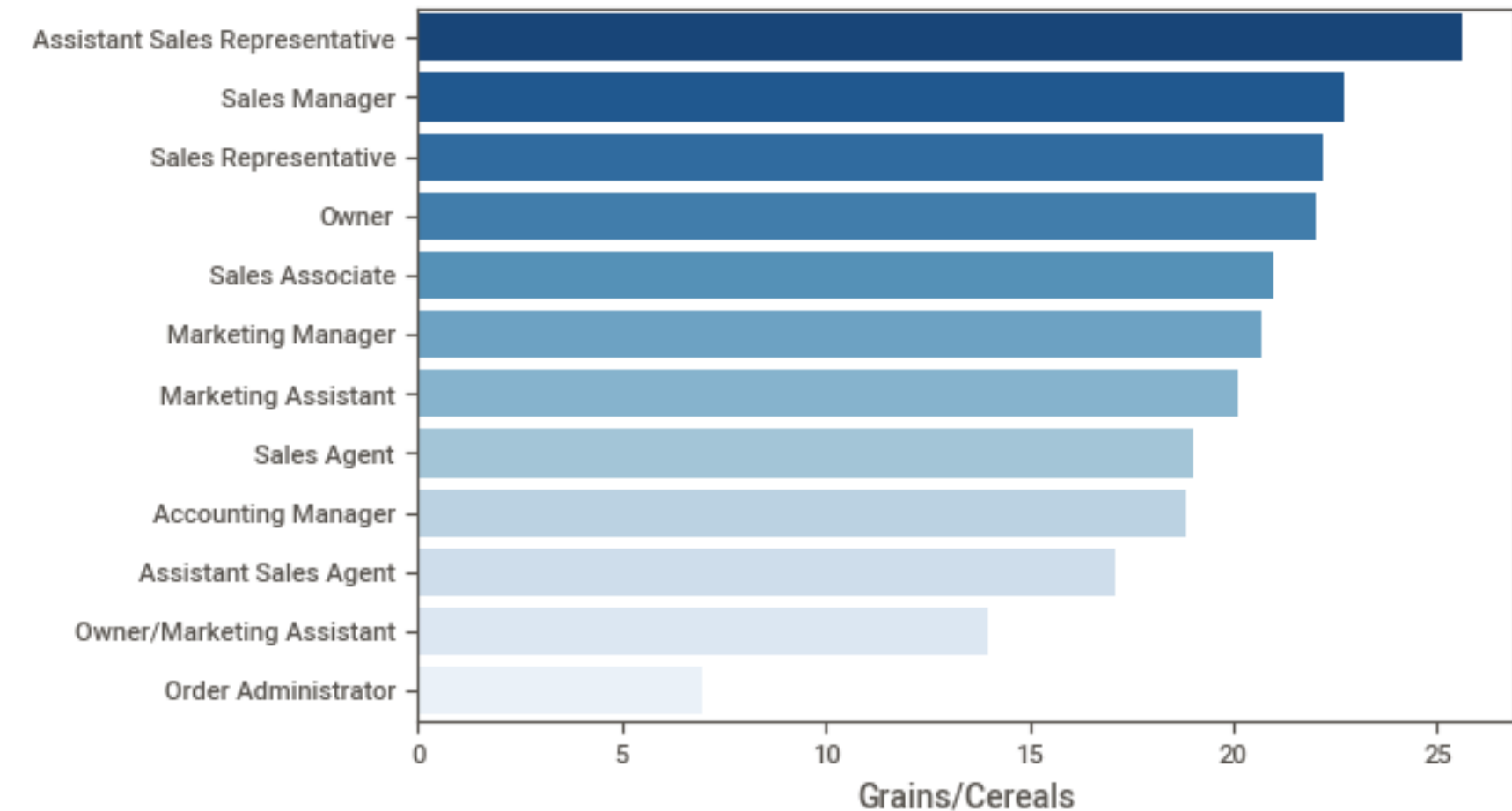
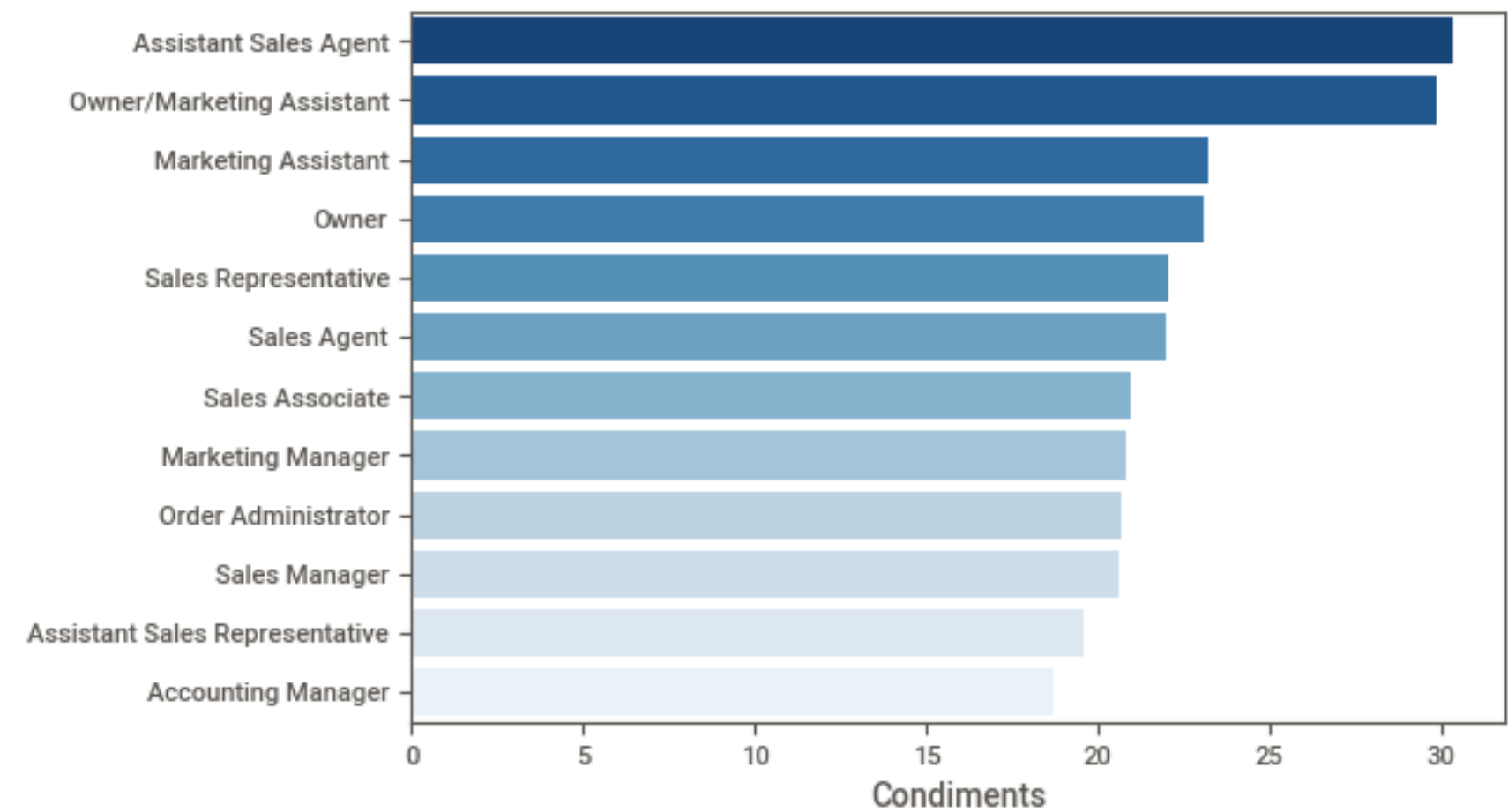
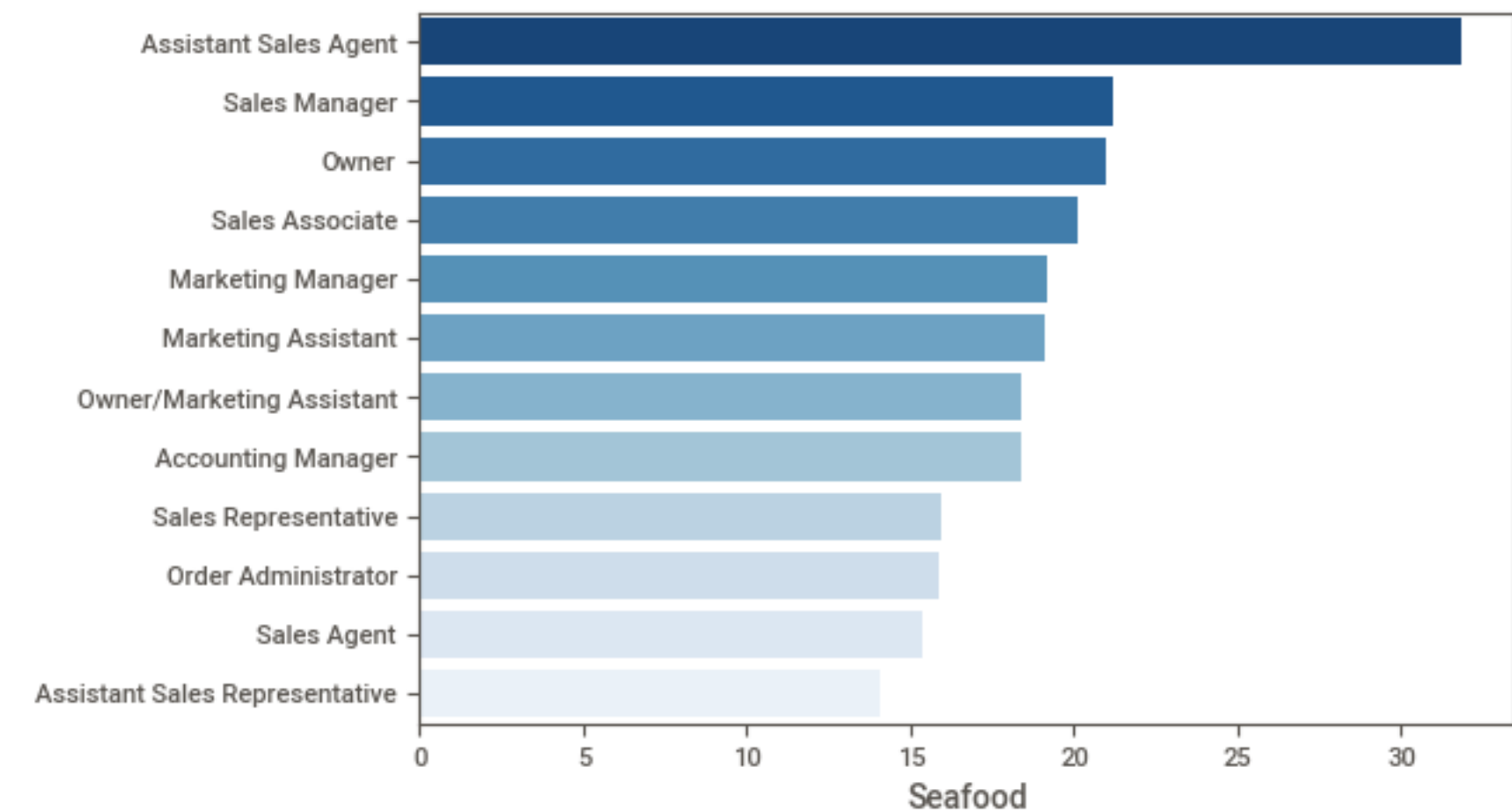
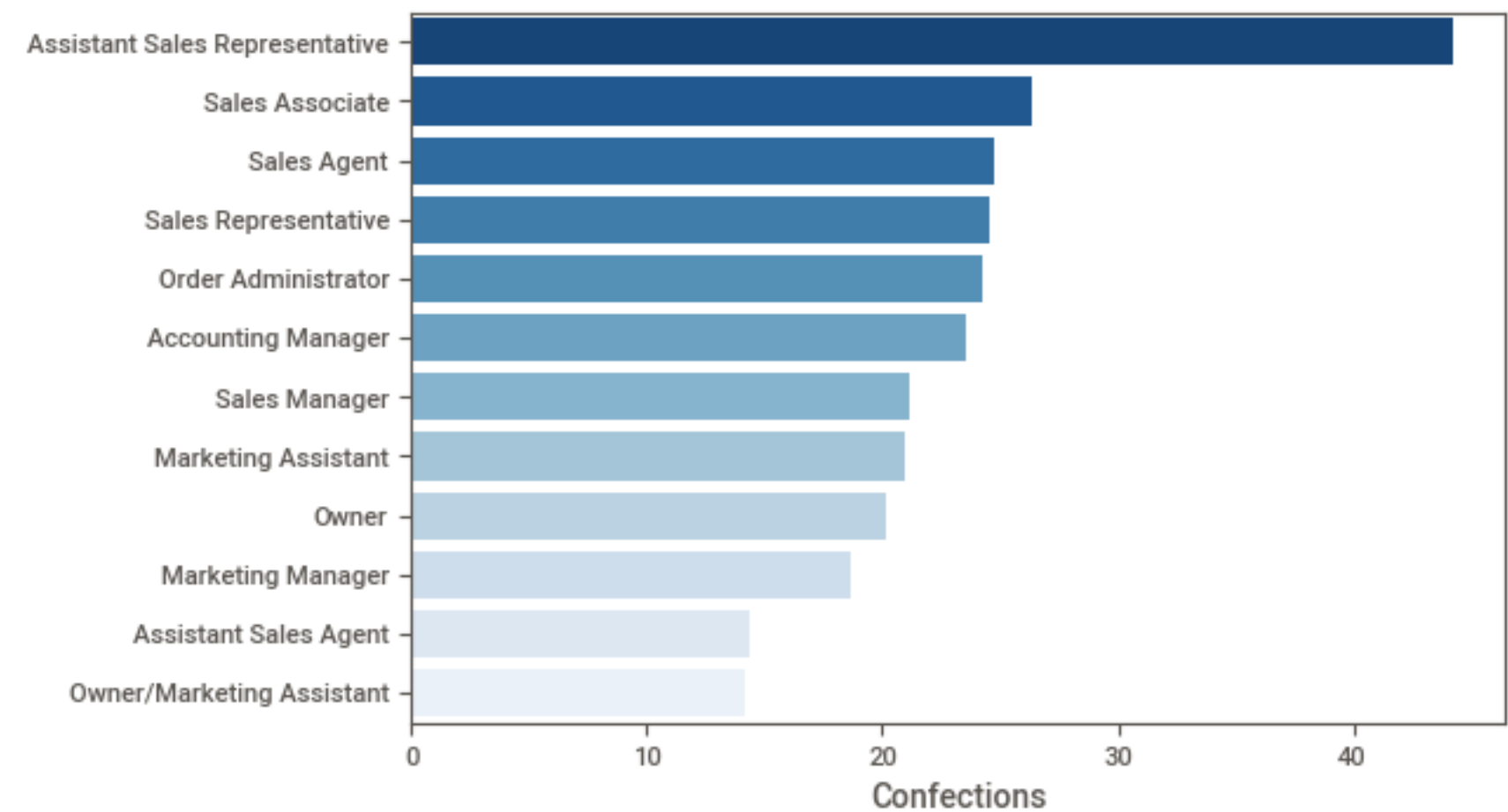
LEFT JOIN BY
CATEGORY ID



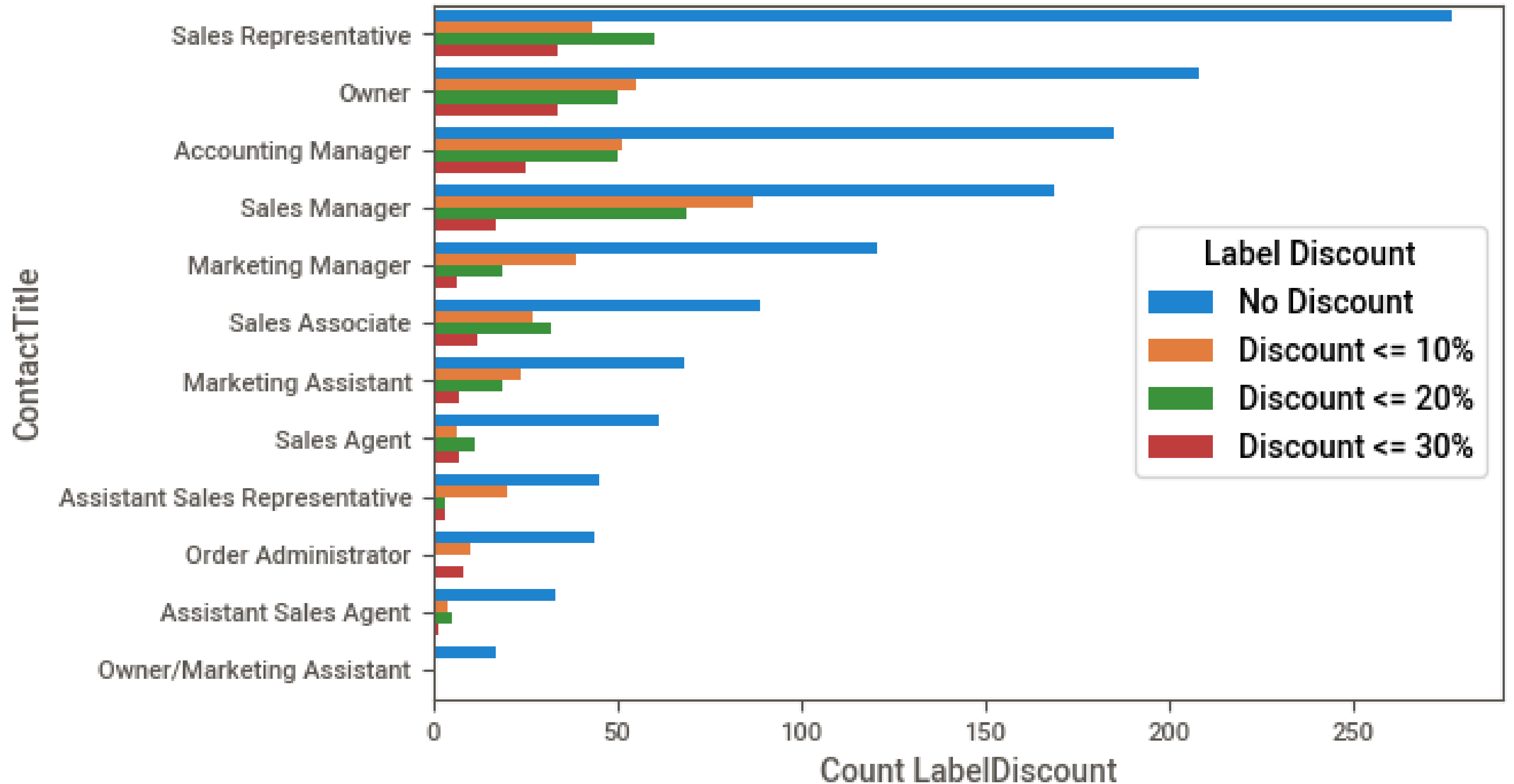
CONSUMER TITLE WITH AVERAGE PRICE ORDER



CONSUMER TITLE WITH AVERAGE PRICE ORDER



CONSUMER TITLE WITH DISCOUNT RATES



Contact Title	CategoryName	Sum Qty	Contact Title	CategoryName	Sum Qty	Contact Title	CategoryName	Sum Qty
Accounting Manager	Beverages	1675	Assistant Sales Agent	Confections	300	Assistant Sales Representative	Dairy Products	340
Accounting Manager	Dairy Products	1589	Assistant Sales Agent	Seafood	220	Assistant Sales Representative	Confections	279
Accounting Manager	Confections	1472	Assistant Sales Agent	Dairy Products	131	Assistant Sales Representative	Beverages	232
Accounting Manager	Seafood	1198	Assistant Sales Agent	Beverages	129	Assistant Sales Representative	Grains/Cereals	158
Accounting Manager	Condiments	1128	Assistant Sales Agent	Grains/Cereals	101	Assistant Sales Representative	Meat/Poultry	128
Marketing Assistant	Beverages	615	Marketing Manager	Dairy Products	802	Owner/Marketing Assistant	Confections	45
Marketing Assistant	Dairy Products	513	Marketing Manager	Beverages	738	Owner/Marketing Assistant	Beverages	38
Marketing Assistant	Confections	471	Marketing Manager	Confections	645	Owner/Marketing Assistant	Condiments	25
Marketing Assistant	Condiments	260	Marketing Manager	Seafood	541	Owner/Marketing Assistant	Dairy Products	14
Marketing Assistant	Seafood	256	Marketing Manager	Grains/Cereals	469	Owner/Marketing Assistant	Seafood	12
Order Administrator	Beverages	279	Sales Representative	Beverages	1865	Sales Associate	Dairy Products	738
Order Administrator	Seafood	252	Sales Representative	Seafood	1836	Sales Associate	Seafood	722
Order Administrator	Confections	203	Sales Representative	Dairy Products	1813	Sales Associate	Beverages	453
Order Administrator	Dairy Products	162	Sales Representative	Confections	1495	Sales Associate	Condiments	427
Order Administrator	Meat/Poultry	108	Sales Representative	Meat/Poultry	1023	Sales Associate	Confections	381
Sales Manager	Beverages	1795	Sales Agent	Dairy Products	347	Owner	Beverages	1431
Sales Manager	Dairy Products	1709	Sales Agent	Beverages	282	Owner	Confections	1157
Sales Manager	Seafood	1280	Sales Agent	Confections	271	Owner	Seafood	1148
Sales Manager	Confections	1187	Sales Agent	Condiments	213	Owner	Dairy Products	991
Sales Manager	Condiments	1154	Sales Agent	Produce	191	Owner	Condiments	903

Summary

1

From the reports of the total qty orders, The potential consumer who has the title which is Sales Representative, Sales Manager, Accounting Manager, and Owner.

2

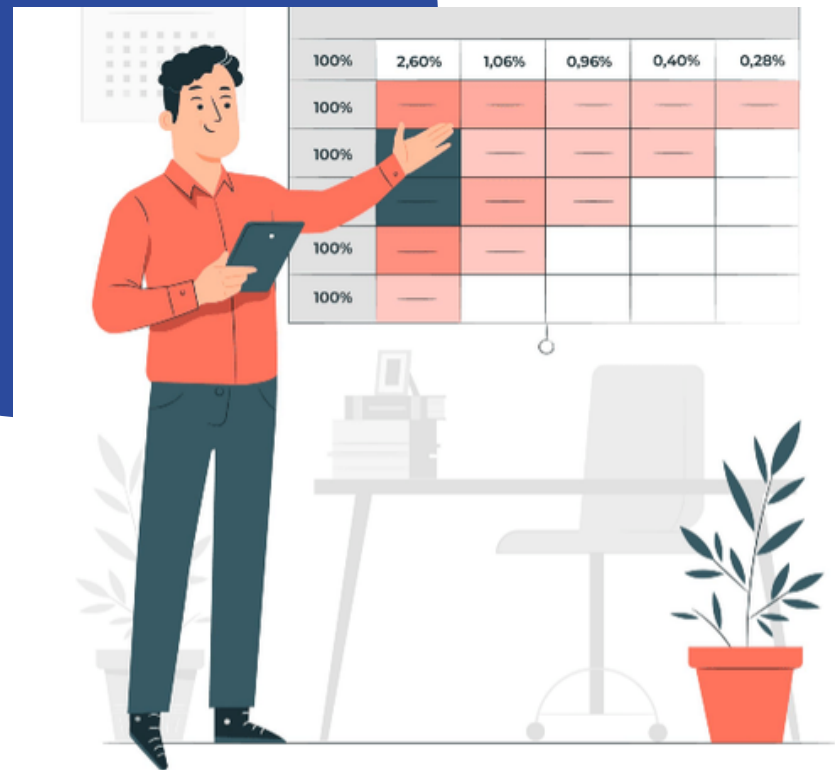
From the reports of the total qty orders, Beverages and Dairy Products are the most ordered product for all title customer.

NORTHWIND 

COHORT ANALYSIS

- *RETENTION RATE ANALYSIS IN THE YEAR 1997*

**DATA
SCIENCE
INDONESIA**



RESULT PROCESS

**FROM
[RETENTION]
JOIN
INITIAL USER**

**[RETENTION]
FROM
FIRST BUY**

**[INITIAL
USER]
FROM
FIRST BUY**

COUNT BY CUSTOMER ID

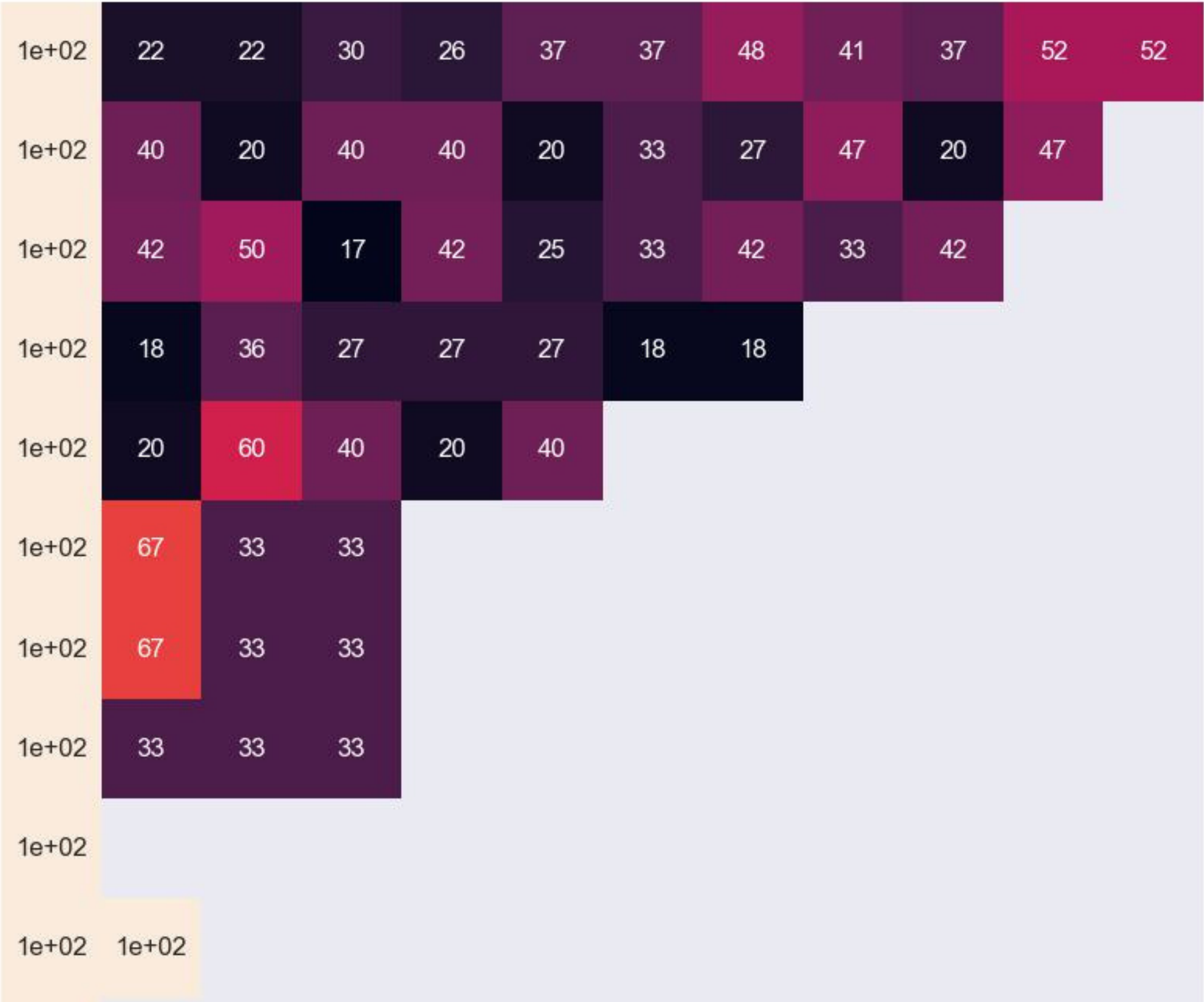
LEFT JOIN BY
CUSTOMER ID

**[NEXT
PURCHASE]
FROM
ORDERS**

LEFT JOIN BY
CUSTOMER ID

**[FIRST BUY]
FROM
ORDERS**

ANALYSIS TO ASSESS WHETHER THE RESULT BELOW IS ACCEPTABLE OR NOT



Summary

1

From the reports of the retention, it can be seen that some % of people in the group (title customer) return to order every month.

2

From the reports, the early months of customer buying reflect the performance of both the service and some products.

THANK YOU



michaelsitanggang18@gmail.com



blogdiskusidata.blogspot.com



East Jakarta, Indonesian

**DATA
SCIENCE
INDONESIA**